Patent claims

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- 1. Method for carrying out a handover procedure in a radio communication system,
- in which a packet switched connection is set up from a mobile station via a first transceiver unit, with the mobile station being assigned to a first cell and a first routing area
 - in which, if the mobile station moves into a second cell which is served by a second transceiver unit, and into a second routing area, the connection is assigned a routing area update identifier.
 - in which a handover procedure of the packet switched connection from the first cell into the second cell is performed,
 - in which, after the handover procedure, an exchange of data via the packet switched connection is resumed again, with a procedure for routing area update being executed after the exchange of data.
 - 2. Method in accordance with Claim 1,
 - in which, before the handover procedure from the first cell into the second cell is executed, radio resources for the packet switched connection will be reserved in the second cell.
 - Method in accordance with Claim 1 or 2,
 - in which, as soon as the connection is assigned the routing area update identifier, data packets are duplicated for the mobile station and are provided both in the first transceiver unit and also in the second transceiver unit.
 - 4. Method in accordance with one of the Claims 1 to 3,
 - in which, after the handover procedure, at least for a

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transitional period, the same data compression and the same data encryption as before the handover procedure is used.

- 5. Method in accordance with one of the Claims 1 to 4,
- in which the mobile station in the first routing area is assigned a first identifier,
- in which the mobile station is assigned a handover identifier for the switch to the second cell, which is used until the procedure for routing area update is performed,
- in which the mobile station is assigned a second identifier in the second routing area.
 - 6. Method in accordance with Claim 5, in which the temporary identifier is selected from a set of identifiers reserved for the purpose.
 - 7. Method in accordance with Claim 5,
- in which the temporary identifier is made up of the first identifier and a supplementary identifier.
 - 8. Method in accordance with one of the Claims 5 to 7, ; in which the temporary identifier is assigned by an administrator.
 - 9. Method in accordance with one of the Claims 5 to 7,
- in which the temporary identifier is assigned by an allocated Serving GPRS Support Node SGSN of the radio communication system.
 - 10. Method in accordance with one of the Claims 1 to 9,
 - in which, to complete the handover procedure, a data packet is sent from the mobile station to the second transceiver unit,
- 25 in which, after receipt of the one data packet the second transceiver unit starts sending to the mobile station.

11. Radio communication system which is embodied such that a method in accordance with one of the Claims 1 to 10 runs on the system.